



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,181	02/19/2004	William E. Corr	DB000956-007	6166

24122 7590 11/17/2004

THORP REED & ARMSTRONG, LLP
ONE OXFORD CENTRE
301 GRANT STREET, 14TH FLOOR
PITTSBURGH, PA 15219-1425

EXAMINER

WACHSMAN, HAL D

ART UNIT	PAPER NUMBER
----------	--------------

2857

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/783,181

Applicant(s)

CORR, WILLIAM E.

Examiner

Hal D Wachsman

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 2 and 4 is/are allowed.
- 6) ☒ Claim(s) 3, 5 and 6 is/are rejected.
- 7) ☒ Claim(s) 8-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. The Cross Reference To Related Applications section on page 1 of the specification does not provide the current status of U.S. application serial no. 10/016,183 (i.e. this is now U.S. patent no. 6,792,374). Appropriate correction is required.
2. The newly submitted Figure 10 is objected to under 37 C.F.R. 1.121 because it is not identified in the top margin as "New Sheet" (Figure 10 has at top "New *Page* for Application Serial Number 10/783,181). Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stinson et al. (6,553,545) in view of Durham et al. (6,532,574).

As per claim 3, Stinson et al. (Abstract, col. 2 lines 40-50, 55-60, col. 3 lines 15-21) disclose a test circuit operable to produce a signal for determining an operating reference signal. It appears though that Stinson et al. does not clearly disclose another test circuit operable to produce a signal for determining an effect of power supply noise on a signal propagation delay within a plurality of components. However, Durham et al. (col.1 lines 25-37, col. 8 lines 8-23) teach this excepted feature.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Durham et al. to the invention of Stinson et al. as specified above because as taught by Durham et al. (col. 1 lines 26-29) some common forms of noise are **power supply** droop and localized **power variations**, signal line coupling, and Miller effect capacitances across circuit inputs/outputs.

As per claim 5, Stinson et al. (Abstract, col. 4 lines 8-15, col. 8 lines 15-17) disclose a test circuit operable to produce a signal for determining a cross-talk effect on a plurality of components within an integrated circuit. It appears though that Stinson et al. does not clearly disclose another test circuit operable to produce a signal for determining an effect of power supply noise on a signal propagation delay within a plurality of components. However, Durham et al. (col.1 lines 25-37, col. 8 lines 8-23) teach this excepted feature. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Durham et al. to the invention of Stinson et al. as specified above because as taught by Durham et al. (col. 1 lines 26-29) some common forms of noise are **power supply** droop and localized **power variations**, signal line coupling, and Miller effect capacitances across circuit inputs/outputs.

As per claim 6, Stinson et al. (Abstract, col. 2 lines 24-33, col. 3 lines 34-36, col. 4 lines 13-15) disclose a test circuit operable to produce a signal for determining an effect of system noise on the operational speed of the plurality of components. It appears though that Stinson et al. does not clearly disclose another test circuit operable to produce a signal for determining an effect of power supply noise on a signal

propagation delay within a plurality of components. However, Durham et al. (col.1 lines 25-37, col. 8 lines 8-23) teach this excepted feature. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Durham et al. to the invention of Stinson et al. as specified above because as taught by Durham et al. (col. 1 lines 26-29) some common forms of noise are **power supply** droop and localized **power variations**, signal line coupling, and Miller effect capacitances across circuit inputs/outputs.

5. Claims 1, 2 and 4 are allowed.

Claims 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following references are cited as being art of additional general interest : Dansky et al. (6,546,529) which disclose the effects of power supply noise on signal propagation and Zhang et al. (5,559,476) which disclose that power supply noise may be a significant problem in mixed-mode circuits including both digital and analog circuitry on the same integrated circuit chip.

7. Applicant's arguments filed 8-25-04 have been fully considered but they are not persuasive with respect to the claims that remain rejected above. With respect to the arguments concerning the 35 U.S.C. 103 rejections and specifically Durham et al., the Applicant refers to Signal 1 – Signal 3 in Figures 2A-2B as well as col. 7 lines 23-26, 31-38. However, none of these cited sections were used from the Durham et al. reference in the 35 U.S.C. 103 rejections but rather what was applied from the Durham et al.

reference, as shown in paragraph 8 of the prior Office action, were **col. 1 lines 25-37** and **col. 8 lines 8-23** and no arguments were presented with respect to these applied sections of the Durham et al. reference.


8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D Wachsman whose telephone number is 571-272-2225. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Hal D Wachsman
Primary Examiner
Art Unit 2857

HW
November 7, 2004